

# Antecedents and Outcomes of Channel Relationships Across Furniture Small-Medium-Enterprises: Measures Development and Propositions

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## **Abstract**

*One of marketing problems within furniture small-medium-enterprises is timely market information. Collaboration between channel members may become a solution, including collaboration between manufacturers and their connecting retailers. Studies found such collaboration not only improved channel relationship performance but also exhibited negative effects. As such, this research continues the findings by engaging both positive and negative impacts of channel relationships within small-medium-enterprises. This research develops measures for antecedents and outcomes that may involve in the positive and negative relationships between small-medium-manufacturers and their connecting retailers. Situated across furniture industry at Jepara Region-Indonesia, the research employs exploratory factor analysis to compose the most suitable indicators resides within their respective constructs. In addition, this research deploys correlational analysis to develop possible relationships among proposed constructs. Two-hundred furniture manufacturers are involved and they mostly deliver their perceptions about relationships with their connecting retailers. This research finds the perceptions are well-grouped into five constructs: collaboration, relationship-specific-investments, agility, opportunism, and relational performance. Furthermore, this study reveals correlations between constructs and subsequently develops propositions. Theoretical and practical implications are discussed.*

**Keywords:** *small-medium-manufacturers, collaboration, relationship-specific-investments, agility, opportunism, relational performance.*

## **1. INTRODUCTION**

Jepara furniture industry, including small-medium-manufacturers, encounters significant decrease since 2005 in term of the number of manufacturers, export volume, and employment [1]. [2], as cited in [3] identified 50% of small-scale furniture manufacturers perceived market access to be their main problem-a constraint that was not a serious issue several years earlier. As such, [4] offer collaboration along the value chain to produce new products or services and to ensure improvements in value added.

This study captures the collaboration idea by developing scales and constructs' propositions that may interplay within channel relationships between small-medium-manufacturers and their connecting local retailers. Studies found such collaborative relationships were not always beneficial, yet to some extents delivered negative impacts [5][6][7]. [7] asserts the negative impacts could be reduced if channel partners can manage the interplay between the positive and negative elements of relationships. [5] and [8] suggest future research to combine social capital (SC) theory and transaction-cost-economy (TCE) theory in exploring the interplay of the positive and the negative sides of channel relationships. As such, this study deploys main constructs under both theories as antecedents and outcomes of channel relationships within small-scale-manufacturers in a furniture industry. The study then considers relational performance as the final outcome of the channel relationships since social capital and TCE can facilitate required to improve performance [9][5][8].

Results of the study contributes to marketing channel research by creating validated measures and construct correlations within SC theory and TCE theory that may be beneficial to the development of future research' hypotheses. From a practical viewpoint, furniture manufacturers may use the validated indicators as a basis for strengthening their bargaining power with their retailers.

## **2. LITERATURE REVIEW**

### **A. Social Capital Theory**

Social capital refers to a valuable asset that stems from access to resources provided through social relationships [10]. [9] derive social capital in three dimensions: cognitive, relational, and structural. The cognitive dimension entails shared meaning and understanding between members; the relational dimension refers to trust, friendship, respect, and reciprocity developed through a history of interactions; and the structural dimension describes the pattern of relationships among members [5]. This recent study reviews the literature pertaining only to relational dimension of social capital as it only focuses on the continuous development of relational bonding between channel members.

In the relational dimension, [5] argue through repeated transactions, the channel members have attained trustworthiness and affirmed norms of friendship and reciprocity within the relationship. Trust is likely synergistic with collaboration in curbing uncertainties within the relationships [11][12] and therefore collaboration is a construct that may deliver positive impacts within channel relationships.

Further, ongoing trusted relationship increases channel members' responsiveness and better product portfolios [13][12]. The responsiveness, as a form of firm's agility [14][12], stemmed from superior understanding between channel members, involvement of top managements, and intensive information exchange [12]. Consequently, agility becomes the second construct involved in the positive side of the channel relationships.

### **B. Transaction-Cost-Economy Theory**

Transaction-cost-economy (TCE) theory originates from the work of [15] with the main idea is to capture opportunistic behaviour between parties. Two important assumptions in TCE are opportunism and bounded rationality [16][17]. Whilst opportunism comprises the risk of parties not behave in the interest of the relationship, bounded rationality involves the risk of uncertainty [18]. The primary constructs related to governance in the TCE view are relationship-specific-investments, uncertainty and transaction frequency [17]. Relationship-specific-investments refer to the degree to which transaction specific assets are invested in the relationship [19]. These specific assets introduce risks such as possible hold-up due to opportunism [17]. The risk of opportunism can lead to additional costs of monitoring and coordination [18].

In the context of an ongoing relationship between small-medium-manufacturers and their connecting retailers, this study focuses on relationship-specific-investments and opportunism as key constructs.

### **C. Performance Implication**

Studies posit the positive and the negative constructs of channel members' relationships deliver performance outcomes [5][8][12]. The outcomes encompass firms' performance or relational performance. Firm performance consists of traditional metrics (e.g. market share, profitability, ROI), whilst relational performance comprises strategic and operational performance stemmed from an ongoing relationship [20][5]. This current study focuses on relational performance since the main goal is to identify possible improvement areas of channel relationships.

### **3. METHODS**

#### **A. Measures**

This study delivers five constructs to be explored: collaboration, relationship-specific-investments (RSIs), agility, opportunity, and relational performance. Collaboration and RSI act as antecedents, whilst agility and opportunism posit as consequences. Relational performance is posited as the final outcome of channel relationships. All measures are anchored in 5-points Likert scale (totally agree-totally disagree). The agility construct captures perceptions of the manufacturer about itself, whilst the rest record the manufacturer's perceptions about the relationship with its connecting retailer.

Collaboration refers to a high level of purposeful bilateral engagement that is characterized by information exchange, cooperation and management involvement in the relationship [12]. Adapted from literatures [12][21][22], the measure consists of eight items. Relationship-specific investments are the manufacturer's investments dedicated to the relationship with its particular retailer. Adapted from [23] and [24], this measure comprises of four items. Agility is the firm's ability to adjust its supply chain to rapidly respond changes in market and customer demand. Based on the measures of [14], the measure encompasses seven items. Opportunism describes the extent to which the retailer's behaves in self-seeking activities with guile [25] and this measure consists of five items adapted from [8] and [26]. Lastly, relational performance refers to the extent to which the manufacturer receives benefits as a result of the relationship with its connecting retailer. The measure adapts the scale of [20] and [5] and it consists of five items.

The measures development started from pooling existing measures from relevant literatures. Such collections were then underwent face validity test by discussions with the academic experts, followed by in-depth discussions with three eligible manufacturers. Prior to the in-depth discussions with the manufacturers, the measures were translated into Indonesian language by a trained translator. These steps ensure relevancy of items as well as words clarity of the questionnaire instrument.

#### **B. Sampling and Data Collection**

The unit of analysis for this research is the firm and the preferred target respondents are senior-level managers or owner with knowledge of business relationship with the firm's connecting retailer. A non-random purposive sampling is employed since the directory of Jepara's small-medium-manufacturers was incomplete. Based on [27]' suggestion on sample for Maximum Likelihood (ML) estimation (100-200 samples), the research targets 200 respondents as sample. Such respondents are the small-medium-manufacturers which sell their products in at least an external retailer or an external shop (a retailer that is not involved in one group of company with the manufacturer).

The questionnaires are delivered in-hand by five trained surveyors. They accompany the respondents in filling the questionnaires in accordance to avoid misperceptions and thus this method ensures a very high response rate. All 201 distributed questionnaires are returned, in which only one questionnaire does not meet the criterion (a big-sized company). Hence, the final and usable questionnaires are 200 units.

#### **C. Data Analysis**

The data analysis starts with data cleaning to avoid missing data and outliers. Only one missing data was found and this is remedied by supplying an average value to the particular data. The outliers are not a serious problem since none of the values exceed 3.29 and 95% data is in the normal range [28]. Next, the normality check is performed since the statistical process uses ML estimation [29]. All indicators reveal proper linearity and tolerable range of skewness (close to 0) and kurtosis, and as such these indicate accepted normality.

Having passed these steps, an Exploratory Factor Analysis (EFA) is conducted to ensure the items are well-grouped into their respective constructs and to choose the relevant items for the research. ML serves as the extraction method since the research aims to generalize the sample into the entire population

[28]. Further, a direct oblimin method is conducted as the rotation technique because it allows correlation between underlying factors. Such correlation is logical for any data involving humans [28].

A reliability analysis using Cronbach's alpha is conducted after obtaining the final set of valid measures. Finally, the valid and reliable constructs are correlated to form several propositions.

## **4. RESULTS**

### **A. Profile of the Respondents**

Out of the total 200 respondents, 95% are male and the majority is high-school graduates (60%). Most respondents are the owner of the business (85%) whilst the rest are senior managers. Most companies aged more than 10 years (70%) and small-sized business with the number of employees between 10-20 people (71%). Their sales mostly below 100 million rupiah (81%) which may indicate they are mostly small-sized business. The majority of the respondent engages with 1-5 retailers (83%) with relationship duration of 1-5 years (90%). The connecting retailers mostly contribute a minimum of 20% total sales of the manufacturers (86%) and hence this may indicate a greater dependence of the manufacturer toward its connecting retailers.

### **B. Factor Analysis and Reliability**

This research expects all items are well-grouped into five constructs or factors. Originally, albeit the result shows accepted KMO and Bartlett test, the EFA process reveals seven factors as indicated by a more-than-1 initial eigenvalues. Thus, this study eliminates several problematic items based on the theoretical grounds and residual correlation. The non-redundant residuals with absolute values greater than 0.05 are of concern in this trimming process [28]. Particular items which exhibit many conflicts with the other items are the candidates for deletion. Such combination of qualitative and quantitative techniques finally finds accepted items reside within five factors. The non-redundant residuals exceeding a magnitude of 0.05 are below 50% of the total residual correlations and hence this indicates accepted model fit. The calculation of mean plus two standard deviations for each item also reside within 0.5-5.5 range, an indication of properly fit items [30].

Following the EFA process (statistical validity test), the reliability analysis shows an accepted Cronbach's alpha. All constructs deliver values of more than 0.5 and thus indicate accepted reliability within an exploratory ground [28]. The final set of factor analysis, reliability, mean, and standard deviation is shown in the Table 1.

Table 1. Final measures

Measures	Mean	SD	Decision
<b>A. Collaboration (Cronbach's alpha: 0.810)</b>			
Regarding our working relationship with this retailer:			
1. We are committing to deliver a successful collaboration.			Dropped
2. There are significant efforts (e.g. adding fund or facilities) to develop a sustainable collaboration.	2.34	0.80	Retained
3. We create joint working plan.			Dropped
4. We jointly deal with problems that arise in the collaboration.	2.30	0.86	Retained
5. We routinely exchange information through informal mechanisms.	2.42	0.87	Retained
6. We conduct regular meetings to evaluate business progress.	2.57	0.89	Retained
7. We share information that likely benefit the retailer.			Dropped
8. We ensure that both of us always receive information about events that may influence each party.			Dropped
<b>B. Relationship-specific-investments (RSIs) (Cronbach's alpha: 0.817)</b>			
Regarding our working relationship with this retailer:			
1. We incur significant investments (e.g. fund, employees, and equipments) only for this relationship.	2.54	0.95	Retained
2. We significantly adjust our work (e.g. overtime work) to serve the retailer's demand.	2.32	0.73	Retained
3. Our logistics has been adjusted to serve the retailer's demand (e.g. faster delivery).	2.38	0.78	Retained
4. Training our employees to serve the retailer has involved substantial commitments of time and money.	2.62	0.92	Retained
<b>C. Agility (Cronbach's alpha: 0.504)</b>			
We:			
1. Can quickly detect changes in business environment.			Dropped
2. Are successfully able to obtain the information we demand from our customers.	2.06	0.63	Retained
3. Can make definite decisions to address business opportunities.	2.02	0.65	Retained
4. Can make firm decisions to respond the business threats.			Dropped
5. Can adjust our operations required for executing decisions.			Dropped
6. Can increase short-term production capacity as needed (i.e. increasing work hour).	2.18	0.58	Retained
7. Can adjust the specification of orders as requested by our customers.			Dropped
<b>D. Opportunism (Cronbach's alpha: 0.910)</b>			
Regarding our working relationship with this retailer:			
1. Sometimes, the retailer lies about certain things in order to protect their interests.	3.07	0.99	Retained
2. The retailer sometimes promises to do things without actually doing them later.			Dropped
3. The retailer sometimes tries to breach our agreements to their benefit.	3.18	1.07	Retained
4. The retailer tries to take advantage of 'holes' in our agreements to further their own interests.	3.25	0.99	Retained
5. The retailer sometimes uses unexpected events (e.g. products delivery) to extract concessions from us .	3.17	0.98	Retained
<b>E. Relational performance (Cronbach's alpha: 0.614)</b>			
In our cooperation with this retailer, we have successfully:			
1. Created new generation of products.	1.92	0.58	Retained
2. Opened up new markets.	2.07	0.70	Retained
3. Learned about customers' wants.			Dropped
4. Improved products quality.	1.85	0.60	Retained
5. Improved quality of the production processes.	1.87	0.65	Retained

### C. Correlation Analysis

The correlation analysis is conducted through Pearson's correlation for the five constructs. The result reveals all constructs are correlated, except for the opportunism and relational performance. Table 2 shows the correlation findings.

Table 2. Correlations between constructs

		Agility	Collaboration	Relationship-Specific-Investments	Opportunism	Relational Performance
Agility	Pearson Correlation	1	.355**	.186**	.139*	.173*
	Sig. (2-tailed)		0	0.008	0.049	0.014
	N	200	200	200	200	200
Collaboration	Pearson Correlation	.355**	1	.577**	.273**	.456**
	Sig. (2-tailed)	0		0	0	0
	N	200	200	200	200	200
Relationship-Specific-Investments	Pearson Correlation	.186**	.577**	1	.345**	.447**
	Sig. (2-tailed)	0.008	0		0	0
	N	200	200	200	200	200
Opportunism	Pearson Correlation	.139*	.273**	.345**	1	0.095
	Sig. (2-tailed)	0.049	0	0		0.183
	N	200	200	200	200	200
Relational Performance	Pearson Correlation	.173*	.456**	.447**	0.095	1
	Sig. (2-tailed)	0.014	0	0	0.183	
	N	200	200	200	200	200

\*\* . Correlation is significant at the 0.01 level (2-tailed).  
\* . Correlation is significant at the 0.05 level (2-tailed).

Based on the correlation, this study develops propositions as follow: (1) Collaboration relates with relationship-specific-investments, agility, opportunism, and relational performance, (2) Relationship-specific-investments relates with collaboration, agility, opportunism, and relational performance, (3) Agility relates with relationship-specific-investments, collaboration, opportunism, and relational performance, (4) Opportunism relates with relationship-specific-investments, collaboration, and agility, and (5) Relational performance relates with relationship-specific-investments, collaboration, and agility.

## 5. DISCUSSION

The retained and dropped items generally show differences with the previous research. On the antecedents strand, the collaboration construct reveal only four items retained, out of the earlier eight items. The dropped item ‘we and the shop create joint work plan’ indicates both parties may not engage in a formal working relationship. This is contrary to the findings of [21]. Notwithstanding, both parties seem realize the benefit of informal collaboration and therefore they routinely shares beneficial information and conducts frequent meeting. This activity is supported by both commitments to invest resources useful for a sustainable collaboration.

The findings in the RSIs construct likely in-line with previous research [25][23][24] since all proposed items are retained. This indicates the previous measures were likely rigor. The items may indicate the manufacturer is more dependent to the connecting retailer and hence it is likely prone to opportunism of retailer.

Within the consequences area, the agility construct find only three items retained, out of the total seven items. This is contrast with the findings of [14] and this may stem from the different company size with the previous study. Small to medium sized companies in this current research may imply that they do not have enough resources to respond changes in the business environment, such as quickly adjusting their operational activities to support decision making. Moreover, many dropped items in this construct

show cross-loads with the other constructs' items. This may indicate a similar meaning of the dropped items with the other items.

Almost all opportunism items in this study are retained. This may indicate a tendency of retailers to use frequent tricks in maximizing their benefit and this may also show that the relationship is more transactional instead of relational. The findings are in line with the previous research [25][24][8].

The final consequence, relational performance, also finds that almost all items are retained. The finding is in line with [20] and [5]. The only dropped item is 'learning about customers' and this may indicate a cross-loading with the items within agility construct. The retained items may imply the manufacturers gain significant benefits from their cooperation with the connecting retailers.

In addition, the significant correlations between most constructs may indicate a possibility to develop further hypotheses. Previous research [8][14][12] are amongst the relevant sources for the hypotheses development since their findings were in-line with this study. Nevertheless, an insignificant correlation between opportunism and relational performance may warrant attempts to develop hypothesis between both items. Perhaps the hypothesis development should be based on previous research around small-medium-enterprises settings.

On the theoretical implications, the findings of this study deliver validated measures and possible construct relationships for future research. This study shows initial supports to the extension of SC and TCE theories and it enriches the existence of positive and negative impacts in the working relationships between channel members. In the practical ground, small-medium-manufacturers could use the presence of measures to negotiate and to increase their bargaining power with their connecting retailers. For instance, the opportunism items may urge the manufacturers to create a formal contract with their retailers stating the extent to which actions are accepted for gaining each party's benefits. This may reduce insecurity in conducting collaboration and may improve such collaboration into a better level. A better collaboration may help the furniture manufacturers to attain timely information and delivering better marketing strategies.

The study is limited in the chosen items for scales development. For example, the collaboration construct mostly deploys [12]' view. Future research may use the other dimensions, such as synchronized planning [21] and joint planning [22]. On the methods strand, the study only collect manufacturers' view and hence future research may collect information from the connecting retailers to create a dyadic research. The findings of a dyadic research may deliver matched perceptions of both parties and thus may lead into a relationship harmony.

## **6. CONCLUSION**

Furniture small-medium-manufacturers in Jepara Region require better marketing strategies and a close working relationship with their connecting retailers may become a solution in attaining timely customer and market information. This study aims to develop validated measures for channel relationships between small-medium-manufacturers and their connecting retailers in Jepara furniture industry, based on the combination of SC and TCE theories that capture the positive and negative impacts of relationships among channel members.

The findings show the negative impacts' items represented by RSIs and opportunism constructs are mostly retained. On the other hand, the items within the positive side represented by collaboration and agility constructs are significantly dropped. This may imply a transactional relationship mostly exists instead of relational one. The findings likely suggest the manufacturers to create a formal agreement with their connecting retailers to minimize the effects of opportunism and securing working relationships.

The findings likely corroborate SC and TCE theories are valid in deriving measures of marketing channel relationships. The measures could be used for future research and the correlations between constructs may imply such proposed relationships are a proper starting point in developing future research' hypotheses.

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